

Dazatronyx Brown Sound Bill of Materials

| Parts                                                                            | Qty | Value         | Markings / notes                                                                                           |
|----------------------------------------------------------------------------------|-----|---------------|------------------------------------------------------------------------------------------------------------|
| <i>Inductor (green)</i>                                                          |     |               |                                                                                                            |
| L1                                                                               | 1   | 6800µH        | <i>BLU, GRY, RED, SILVER</i> (bend legs down firmly) Alternative: 10Ω, 22Ω, 33Ω resistor                   |
| <i>Capacitors - Axial, silver/metal polystyrene (5mm radial also acceptable)</i> |     |               |                                                                                                            |
| C6                                                                               | 1   | 150p          | 150                                                                                                        |
| C5                                                                               | 1   | 470p          | 470                                                                                                        |
| C1                                                                               | 1   | 680p          | 680 Alternative: 220pf (used in original) or <b>1000p / 1n (previously used)</b>                           |
| C13, C14                                                                         | 2   | 2n2 / 0.0022µ | 2200                                                                                                       |
| <i>Capacitors - Radial 5mm</i>                                                   |     |               |                                                                                                            |
| C4, C10, C12                                                                     | 3   | 22n / 0.022µ  | 223                                                                                                        |
| C2                                                                               | 1   | 68n / 0.068µ  | 683                                                                                                        |
| C7, C8                                                                           | 2   | 100n / 0.1µ   | 104                                                                                                        |
| C3, C9                                                                           | 2   | 1µ            | 1µF / 105, CBB polypropylene or film MKT, 5.0/5.08mm pitch                                                 |
| <i>Diode (polarity sensitive)</i>                                                |     |               |                                                                                                            |
| D2                                                                               | 1   | LED           | High-intensity / ultra bright clear kind. Short leg goes into the square pad. Insert underneath the board. |

|                                                                                                              |   |       |              |
|--------------------------------------------------------------------------------------------------------------|---|-------|--------------|
| <i>Potentiometers (do not solder to PCB until all potentiometers are tightly assembled in the enclosure)</i> |   |       |              |
| VOLUME                                                                                                       | 1 | 100KA | 16mm, log    |
| tone                                                                                                         | 1 | 100KB | 16mm, linear |
| DRIVE                                                                                                        | 1 | 500KA | 16mm, log    |

|                                   |   |                                                         |  |
|-----------------------------------|---|---------------------------------------------------------|--|
| <i>Additional parts checklist</i> |   |                                                         |  |
|                                   | 1 | Printed circuit board (PCB)                             |  |
|                                   | 1 | 1590BS enclosure + lid + screws                         |  |
|                                   | 1 | 3PDT footswitch (latching) + metal washer               |  |
|                                   | 1 | 2.1mm DC socket (must be plastic cased type, not metal) |  |
|                                   | 1 | mono open frame audio socket 1/4” + flat washer + nut   |  |
|                                   | 1 | stereo open frame audio socket 1/4” + flat washer + nut |  |
|                                   | 2 | serrated star washers for audio sockets                 |  |
|                                   | 3 | knobs                                                   |  |
|                                   | 3 | extra potentiometer nuts                                |  |
|                                   | 1 | potentiometer plastic cap (optional)                    |  |
|                                   | 1 | 9V battery connector (optional)                         |  |
|                                   | 1 | 5mm LED clear plastic diffuser/mount                    |  |
|                                   | 1 | 25mm wire (footswitch OUT)                              |  |
|                                   | 1 | 54mm wire (negative)                                    |  |
|                                   |   | solder (lead-free)                                      |  |

- Further notes*
  - Be careful to trim all wires near potentiometers close to the board, so as to avoid short circuits between the board and the pots. Check there is enough clearance before assembling.
- Avoid soldering the potentiometers, LED, and footswitch, until all of the hardware is mounted tightly inside the enclosure in final locations. This will prevent stress on the hardware and the supporting pads.
- Extra pads are provided for the axial capacitors to additionally support standard 5mm spaced capacitors.
- There is a 33K LED current limiting resistor installed on-board. This is suited to *high intensity* (ultra bright) style clear 3mm or 5mm LEDs.
- To make the knobs sit lower on the pot shafts, an additional nut is suggested to be fitted to the base of each potentiometer to space it further away from the enclosure.

*Debugging*

I will do my best to answer any technical questions about building the circuit, even small ones. Unfortunately, however, I may not always have the resources to *remotely* help you to debug circuits which are not working correctly, as this will almost always be a soldering or assembly fault. General debugging support is best found online through DIY building groups. Unsuccessful builds may be posted back to me for debugging and fixing for an additional fee. Contact me if you need replacement parts.

*Feedback*

Any feedback or suggestions are always welcomed and may help contribute to future updates. My technical knowledge is limited, and I am happy to crowd-source as much free information as I can. Please consider that these documents may be revised at any time, so it is better to share a link, rather than the actual file.

*Licensing*

Circuit board layout and all documentation are copyright © Darron Thornbury. The board may be used for private or commercial use.